

App. No. 10/604,512
Response dated October 5, 2005
Reply to Office Action of July 5, 2005

Amendments to the Specification (other than claims):

Please replace paragraph [0033] with the following amended paragraph:

[0033] Screen printing is used to spread a conductive paste and form the electrical circuits onto a sinter having undergone the polishing process. The conductive paste can be obtained by mixing together with a metal powder an oxidized oxide powder, a binder, and a solvent according to requirements. The metal powder is preferably tungsten, molybdenum or tantalum, since their thermal expansion coefficients match those of ceramics.

Please replace paragraph [0034] with the following amended paragraph:

[0034] Adding the oxidized oxide powder to the conductive paste is also to enhance the strength with which it bonds to AlN. The oxidized oxide powder preferably is an oxide of Group IIa or Group IIIa elements, or is Al_2O_3 , SiO_2 , or a like oxide. Yttrium oxide is especially preferable because it has very good wettability with AlN. The amount of such oxides added is preferably 0.1 to 30 wt. %. If the amount is less than 0.1 wt. %, the bonding strength between AlN and the metal layer being the circuit that has been formed deteriorates. On the other hand, amounts in excess of 30 wt. % make the electrical resistance of the circuit metal layer high.

Please replace paragraph [0047] with the following amended paragraph:

[0047] A metal layer of predetermined form that serves as an electrical circuit is formed onto the abovementioned sheet using a technique such as screen printing to spread onto it a conductive paste. The conductive paste utilized can be the same as that which was described under the post-metallization method. Nevertheless, not adding an oxidized oxide powder to the conductive paste does not hinder the co-firing method.